

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. After amending the claims as set forth above, claims 1-5 and 7-15 are now pending in this application.

Applicant would like to thank the Examiner for the careful consideration given to the claims as well as indicating that claims 6, 7, 11, and 12 have allowable subject matter.

Rejection of claims 1-5 as being unpatentable over JP '321 over JP '268

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference 11-101321 ("JP '321") in view of Japanese reference ("JP '268"). For at least the following reasons, this rejection is traversed.

Claim 1 has been amended to include the subject matter of claim 6, which has been indicated to be allowable if rewritten into independent form, in addition to removing the ratio-change-control hydraulic system limitations. Thus, claim 1 requires a secondary pump in which "the secondary oil pump is held at the inoperative state by maintaining the pumping element in a spaced, contact-free relationship with the pump driving element by the modulated hydraulic pressure constantly produced during operation of the prime mover." As a result, claim 1 provides a toroidal CVT employing a secondary oil pump 22 (driven in response to rotation of a road wheel) as well as a primary oil pump 21 (driven by a prime mover 1), capable of preventing the secondary oil pump 22 from being driven in response to rotation of the road wheel by holding the secondary oil pump 22 at its inoperative state by way of a modulated hydraulic pressure (such as for example P_c , P_L , P_t , P_p) modulated from a hydraulic pressure (a discharge pressure) produced by primary oil pump 21 during operation of the prime mover (engine 1). For example, the secondary oil pump of the embodiment shown in Figs. 2A-2C is constructed as a reciprocating plunger pump that is comprised of an eccentric cam 24 and a radial plunger 26. During operation of the prime mover (engine 1) of Figs. 2A-2C, the radial plunger 26 is maintained in a spaced, contact-free relationship with eccentric cam 24 by way of the modulated hydraulic pressure (P_c , P_L , P_t , P_p). Thus, with the radial plunger 26 held at its retracted position during operation of the prime mover, the radial plunger 26 of the secondary oil pump 22 is not driven by means of the eccentric cam 24,

which is rotated in response to the input rotation transmitted from the road wheels to a countershaft 15.

In contrast, JP '321 merely shows a prime-mover driven primary oil pump 84 that produces a hydraulic pressure used for ratio-changing. JP '268 merely teaches recirculation of the pumped-out working oil through sub oil pump 41 and bypass oil passage 45 with the control valve 48 kept opened, even when sub oil pump 41 is driven during operation of the prime mover (engine 1). Thus, JP '268 fails to disclose the use of a modulated hydraulic pressure modulated for keeping sub oil pump 41 inoperative during operation of the prime mover (engine 1). Because JP '268 and JP '321 do not teach the claimed secondary oil pump, claim 1 is not rendered unpatentable over the prior art for at least this reason.

Claims 2-5 depend from claim 1 and are allowable therewith, for at least the reasons set forth above, without regard to the further patentable limitations contained therein.

For at least these reasons, favorable reconsideration is respectfully requested.

Allowability of Claims 7-15

Claims 7, 8, 13, and 14 depend from claim 1 and are allowable therewith, for at least the reasons set forth above, without regard to the further patentable limitations contained therein.

Claim 11 has been indicated as being allowable if rewritten into independent form including all the limitations of its base claim and any intervening claims. Claim 11 has been rewritten into independent form; thus making it allowable. Claims 9, 10, and 15 depend from claim 11 and are allowable therewith, for at least the reasons set forth above, without regard to the further patentable limitations contained therein.

Claim 12 has been indicated as being allowable if rewritten into independent form including all the limitations of its base claim and any intervening claims. Claim 12 has been rewritten into independent form; thus making it allowable.

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 9/14/2006

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